

**Listing of the Claims - No Amendments:**

This listing of claims reflects all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Previously Presented) A method of initiating a handoff between a serving base station and a target base station in a CDMA communication system having a plurality of base stations in communication with at least one mobile station, wherein each base station transmits at least one associated and corresponding pilot channel that uniquely identifies the base station, comprising the steps of:
  - a) obtaining a first parameter,  $E_b/N_t$ , associated with the serving base station;
  - b) obtaining a second parameter,  $E_b/N_t$ , associated with the target base station;
  - c) determining if the first parameter is less than or equal to the sum of the second parameter and an offset;
  - d) returning to step (a) if the first parameter is not less than or equal to the sum of the second parameter and the offset; and
  - e) initiating a reverse link handoff between the serving and target base stations if the first parameter is less than or equal to the sum of the second parameter and the offset.
2. (Original) The method of initiating a handoff of Claim 1, wherein the step (b) further comprises obtaining a target base station  $E_c/I_o$  value associated with the target base station.
3. (Previously Presented) The method of initiating a handoff of Claim 2, wherein the step (c) of determining if the first parameter is less than or equal to the sum of the second parameter and an offset comprises the sub-steps of:
  - i) determining whether the target base station  $E_c/I_o$  value is greater than a threshold parameter  $T\_Add$ ;
  - ii) returning to step (a) of Claim 1 if the target base station  $E_c/I_o$  value is not greater than the  $T\_Add$  parameter;
  - iii) sending a pilot strength measurement message to the serving base station and adding the target base station to an active set if the target base station  $E_c/I_o$  value is greater than the  $T\_Add$  parameter;

- iv) determining whether the serving base station transmitted an intergenerational handoff direction message to the mobile station;
  - v) returning to step (a) of Claim 1 if the serving base station did not transmit an intergenerational handoff direction message to the mobile station;
  - vi) proceeding to step (d) of Claim 1 if the serving base station transmitted an intergenerational handoff direction message to the mobile station;
  - vii) obtaining the first parameter from the serving base station and the second parameter from the target base station; and
  - viii) determining if the first parameter is less than or equal to the sum of the second parameter and the offset.
4. (Previously Presented) The method of initiating a handoff of Claim 1, wherein the serving base station and the target base station operate in accordance to different generations of CDMA systems.
5. (Original) The method of initiating a handoff of Claim 1, wherein the offset is based on a Frame Error Rate (FER) parameter.
6. (Original) The method of initiating a handoff of Claim 1, wherein the offset is based on a Quality of Service (QoS) parameter.
7. (Original) The method of initiating a handoff of Claim 1, wherein the step (e) of initiating a reverse link handoff is autonomously performed by the mobile station.
8. (Original) The method of initiating a handoff of Claim 1, wherein the handoff is an intergenerational soft handoff comprising a forward link soft handoff and a reverse link hard handoff.
9. (Original) The method of initiating a handoff of Claim 8, wherein the handoff is autonomously performed by the mobile station.
10. (Original) The method of initiating a handoff of Claim 1, wherein the handoff is an intergenerational hard handoff comprising a forward link hard handoff and a reverse link hard handoff.
11. (Original) The method of initiating a handoff of Claim 10, wherein the handoff is autonomously performed by the mobile station.
12. (Previously Presented) An apparatus for initiating a handoff between a serving base station and a target base station in a CDMA communication system having a plurality of base stations in

communication with at least one mobile station, wherein each base station transmits at least one associated and corresponding pilot channel that uniquely identifies the base station, comprising:

- a) mobile station transmission control facilities configured to send a pilot strength measurement message to the serving base station, and to add the target base station to an active set when a first parameter,  $E_c/I_o$ , associated with the target base station is greater than a threshold parameter  $T\_Add$ ; and
- b) a mobile station handoff control module configured to initiate a reverse link intergenerational hard handoff, when a second parameter,  $E_b/N_t$ , associated with the serving base station is less than or equal to a sum of a third parameter,  $E_b/N_t$ , associated with the target base station and an offset.

- 13. (Previously Presented) The apparatus of Claim 12, wherein the serving base station and the target base station operate in accordance to different generations of CDMA systems.
- 14. (Previously Presented) The apparatus of Claim 12, wherein the offset is a difference between a value of the third parameter,  $E_b/N_t$  that is required by the target base station, and a value of the second parameter,  $E_b/N_t$  that is required by the serving base station.
- 15. (Original) The apparatus of Claim 12, wherein the offset is based on a Frame Error Rate (FER) parameter.
- 16. (Original) The apparatus of Claim 15, wherein the FER parameter comprises a 1% FER.
- 17. (Original) The apparatus of Claim 12, wherein the offset is based on a Quality of Service (QoS) parameter.
- 18. (Previously Presented) The apparatus of Claim 12, wherein the reverse link intergenerational hard handoff is autonomously initiated by the mobile station.
- 19. (Previously Presented) The apparatus of Claim 12, wherein the handoff between the serving and target base stations is an intergenerational soft handoff comprising a forward link soft handoff and a reverse link hard handoff.
- 20. (Previously Presented) The apparatus of Claim 12, wherein the handoff between the serving and target base stations is an intergenerational hard handoff comprising a forward link hard handoff and a reverse link hard handoff.

21. (Previously Presented) A computer program executable on a computing device, wherein the program is capable of directing initiation of a reverse link handoff in a CDMA communication system having a plurality of base stations in communication with at least one mobile station, wherein each base station transmits at least one associated and corresponding pilot channel that uniquely identifies the base station, comprising:
- a) a first set of instructions for monitoring a first parameter obtained from the serving base station, wherein the first parameter comprises the value of  $E_b/N_t$  that is associated with the serving base station;
  - b) a second set of instructions for monitoring a second parameter obtained from the target base station, wherein the second parameter comprises the value  $E_b/N_t$ , that is associated with the target base station;
  - c) a third set of instructions for determining if the first parameter is less than or equal to the sum of the second parameter and an offset; and
  - d) a fourth set of instructions for initiating a reverse link intergenerational hard handoff between the serving and target base stations if the first parameter is less than or equal to the sum of the second parameter and the offset.
22. (Previously Presented) An apparatus for initiating a handoff between a serving base station and a target base station in a CDMA communication system having a plurality of base stations in communication with at least one mobile station, wherein each base station transmits at least one associated and corresponding pilot channel that uniquely identifies the base station, and wherein the serving base station and the target base station operate in accordance to different generations of CDMA systems, comprising:
- a) means for sending a pilot signal measurement message ("PSMM") to the serving base station and adding the target base station to an active set when a first parameter,  $E_c/I_o$ , associated with the target base station is greater than a threshold parameter  $T\_Add$ ; and
  - b) means for initiating a reverse link intergenerational hard handoff, wherein the hard handoff initiation means is responsive to the serving base station, and wherein the hard handoff initiation means initiates a reverse link intergenerational hard handoff when the serving base station transmits an intergenerational handoff direction message to the mobile station and when a second parameter,  $E_b/N_t$ , associated with the serving base station is less than or

equal to a sum of a third parameter,  $E_b/N_t$ , associated with the target base station and an offset.

23. (Previously Presented) The apparatus of Claim 12, wherein the mobile station handoff control module is further configured to initiate the handoff in (b) in response to the serving base station, when the serving base station transmits an intergenerational handoff direction message to the mobile station.
24. (Previously Presented) The apparatus of Claim 19, wherein the mobile station is configured to autonomously perform the intergenerational soft handoff.
25. (Previously Presented) The apparatus of Claim 20, wherein the mobile station is configured to autonomously perform the intergenerational soft handoff.
26. (Previously Presented) A method of initiating a handoff between a serving base station and a target base station in a CDMA communication system having a plurality of base stations in communication with at least one mobile station, wherein each base station transmits at least one associated and corresponding pilot channel that uniquely identifies the base station, and wherein the serving base station and the target base station operate in accordance to different generations of CDMA systems, comprising:
  - a) monitoring a first parameter reflective of a signal received from the serving base station;
  - b) monitoring a second parameter reflective of a signal received from the target base station;
  - c) monitoring a different third parameter reflective of a signal received from the target base station;
  - d) determining whether the third parameter is greater than a predetermined threshold parameter  $T_{Add}$ , and returning to step (a) if not, else sending a pilot strength measurement message (PSMM) to the serving base station and adding the target base station to an active set;
  - e) determining whether the serving base station transmitted an intergenerational handoff direction message to the mobile station, and returning to step (a) if not, else continuing to step (f);
  - f) determining whether the first parameter is less than or equal to the sum of the second parameter and an offset, and returning to step (a) if not, else initiating a reverse link handoff between the serving and target base stations.

27. (Previously Presented) The method of Claim 26, further comprising basing the offset of step (f) on a Quality of Service (QoS) factor.
28. (Previously Presented) The method of Claim 26, further comprising basing the offset of step (f) on a Frame Error Rate (FER) factor.
29. (Previously Presented) The method of Claim 26, wherein the first parameter is a first  $E_b/N_t$  value associated with the serving base station.
30. (Previously Presented) The method of Claim 26, wherein the second parameter is a second  $E_b/N_t$  value associated with the target base station.
31. (Previously Presented) The method of Claim 26, wherein the third parameter is an  $E_c/I_o$  value associated with the target base station.